

NOXIOUS WEED MANAGEMENT PLAN

STILLWATER COUNTY

(Revised December 2010)

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This plan was originally drawn up in 1986, revised in 1996, 2008, and most recently revised in December 2010 by the Stillwater County Noxious Weed Management Board and approved by the Stillwater County Commissioners.

I. INTRODUCTION

Stillwater County is making every effort to comply with the 1985 Weed Management Act as prescribed by the legislature of Montana. The Stillwater Board of County Commissioners has maintained compliance by establishing a Stillwater County Weed District and appointing a Stillwater County Weed Management Board. The Board provides direction to a fully funded county weed coordinator and a part time assistant coordinator. The program is implemented in compliance with federal and state requirements. This Weed Management Plan serves to document details of the Stillwater County Weed Program.

As invasive plant species spread rapidly across the United States, noxious weeds have become a major economic and ecological concern for Montana and Stillwater County. Noxious weeds have become a serious issued with the people of Montana, including non-agricultural interests. The state legislature has responded with a requirement for each county to develop a weed management program, while public lands and roads are the responsibility of federal, state and local authorities. Private landowners in Montana have been declared responsible for the control of noxious weeds on their property. Therefore, leadership, coordination and support of private landowners in controlling noxious weeds is therefore as much a concern of the County program as is attention to the public areas.

The purpose of the Weed District Management Program in Stillwater County is to serve all the people of Montana in improving the economic, environmental, social and practical concerns by:

- Complying with Montana statues
- Focusing limited resources most effectively
- Assisting traditional agricultural sectors of economy by reducing the cost of and improving yields of crops and grazing animals
- Enhancing the environment, aesthetic and land values considerations for the long term and new residents as well as for transient recreational users.

Without pursuing effective noxious weed management, present infestations will continue to spread throughout the County and new invasive species will gain a foothold. Native wildlife and vegetation communities will come under increasing strain, vital watersheds will be damaged and the economic and social costs of noxious weed control will become prohibitive.

II. SITUATION STATEMENT

Stillwater County is located in south-central Montana, in the Yellowstone River drainage basin. In addition to the rivers, Interstate 90 and Montana Rail Link cross the County, constantly introducing noxious weed seeds from the east and west. This intra-county distribution system for noxious weeds is broadened by a network of almost 900 miles of internal Stillwater County roads, and many additional miles of private roads.

Total land ownership equals 1,152,640 acres with government lands accounting for 20% and the remaining being private ownership. Approximately 32,000 acres of private lands have been subdivided. Several new subdivisions have been inspected by the Weed Supervisor within the last two years in this county. The trend is expected to continue. Land use patterns are changing, as is true all over the Western United States and particularly Montana. With division of the land, there are a host of unique challenges arising from increasing numbers of new residents and absentee owners. Population is now the same as it was in 1910.

Soils vary considerable throughout the County. In the northern part of the County, heavy clay soils lead to saline seep problems; in the southern part, there are both alluvial and mountain-type soils. No one noxious weed solution fits all the situations.

The County seat of Stillwater County is the incorporated Town of Columbus, centrally located with five unincorporated communities in outlying areas. Total population is just over 8,500 for the County with the town of Columbus inhabited by almost 2,000 people. The County is experiencing an almost 5% annual population growth from commercial activity and residential immigration. Many residents commute to work, both intra-county and inter-county and the movement of commuters, seasonal recreational users and weekend visitors is a factor in spreading weeds along highways as well as back county areas.

The history of noxious weeds dates to the 1940's with the introduction of leafy spurge in southern areas of the County. Increased transportation of livestock feed, the expansion of the mining activity and recreation activity led to the introduction of Spotted Knapweed in the 1960's. Dalmatian toadflax began to appear in the late 1970's. Extreme weather conditions over the years have enhanced the environment of other noxious weeds.

The general public is becoming more aware of potential problem weeds through educational efforts such as brochures, news releases, television spots, the efforts of local citizen groups, trade show booths, etc. Stillwater County and the state have made a more concerted effort to promote awareness and cooperation among seasonal residents and government agencies over time. This has provided long-time residents of the county with a more positive attitude toward noxious weed control. Among new landowners, both resident and seasonal, the degree of understanding and follow-up efforts varies. This in itself presents additional challenges which must be addressed.

The current Stillwater County Noxious Weed list consists of the State-mandated list of species in the Priority 1A, Priority 1B, Priority 2A, Priority 2B, and Priority 3 (see Attachment C.). In addition to those species on the State list, however, Stillwater County has two additional species on its prescribed list: burdock and mullein.

Specific problem areas in Stillwater County are as follows: Leafy spurge is moving downstream on the Yellowstone River and Stillwater drainages, infesting islands and adjacent land. Infestations in these environmentally sensitive areas are especially difficult to control. Spotted knapweed is present in the county as well as adjacent counties and we continue to aggressively work to prevent its spread.

Dalmatian toadflax and other new species are moving in from the western areas of Montana along interstate 90 and the railroad. It has been recently discovered on the north boarder of the county.

Yellow Starthistle was recently discovered in a construction lot near Columbus, This has been a major concern for the weed district and county residents as this lot was used for many projects in and around the area. To this date the infestation has been held in check and no other infestations have been found. Monitoring will continue for the foreseeable future.

Salt Cedar is another plant that has drawn much attention in the past five (5) years. The Yellowstone River has many contaminated areas. This is a problem that can be easily kept under control if efforts are taken immediately.

There are currently three large weed projects in operation at a multiple agency and local landowner level these include:

1. The Midnight Canyon Trout Creek Weed Management Area. This is a two (2) year spray project, involving six noxious weeds with the most prevalent being Leafy spurge and Spotted Knapweed. This project works with over 8 large private landowners and several subdivision owners.
2. The Upper Stillwater River WMA is complete and has spawned into the Stillwater Valley Watershed Council targeting spotted knapweed along the headwaters of the Stillwater River and includes Stillwater Mining Company, Stillwater County, NRCS, USFS, Montana FWP's and over 100 private landowners.
3. The Painted Robe Weed Management Area is pending grant funding it is primarily focused on Dalmatian Toadflax and includes thirteen landowners that represent 63,809 acres nestled in an 110,000 acre project area.

The wide diversity of Stillwater County population and variety of landscapes within its borders also contribute to the following potential areas for noxious weed invasion:

- The recreational opportunities of the area contribute to the spread of noxious weed seeds by sportsmen, wildlife, and livestock along the public right-of-ways, rivers and rangelands.
- Gravel sources for construction are a continuing supply of seed being spread along roads throughout the County.
- Movement of farm and timber commodities on County and private roads increases the distribution of seed from rural land.
- The increasing population and resulting utility installations increase the amount of disturbed land, a prime nursery for noxious weed generation.
- Erosion of soil from disturbed areas and from noxious weed infestation is damaging both the ecology and aesthetic appeal of the County's acreages.
- Fires have created large areas of open space that fill in quickly with weeds and create a huge threat to surrounding lands.

The location and extent of noxious weed species is being identified by mapping. Working relationships have been successfully established with the U.S. Forest Service, the U.S. Bureau of Land Management, the Montana Department of Fish, Wildlife and Parks, the Montana Department of Transportation, the Stillwater Mining Company and Montana Rail Link.. Special projects with each have strengthened and expanded mapping and monitoring efforts.

III. GOALS AND PRIORITIES IN STILLWATER COUNTY

A. SHORT TERM GOALS

1. Contain the spread of noxious weeds to those currently infested. Prevent the introduction or further spread of Priority 1A, Priority 1B, Priority 2A, Priority 2B, and Priority 3, species (see Attachment C.).
2. Increase public awareness and participation in the weed management program, with particular attention to citizen's here-to-fore uninvolved in weed management.
3. Integrate Stillwater County Weed Management Plans with other agencies weed management plans.
4. Continue inspection as part of the new subdivision review procedures and filing of short and long term weed plans.
5. Continue existing control efforts on public right of ways including cost share weed programs developed with the Stillwater Road Department and other county and state agencies.
6. Continue to inspect and certify noxious weed free forage.
7. Continue with gravel pit inspections.

B. LONG TERM GOALS

1. Reduce the amount of acreage infested with noxious weeds.

2. Eradicate certain weeds in specific areas.
3. Expand the weed control program to include more acreage and the cooperation of more private landowners.
4. Expand educational efforts with the general public.
5. Continue development of an integrated weed management (IWM) program, including biological control with insects and plant pathogens as well as controlled grazing and the use of herbicides.
6. Strengthen relationships with public and private weed-concerned agencies.

C. WEED MANAGEMENT PRIORITIES

1. Continue and expand educational programs with county citizen groups, schools and landowner associations. Explain the value of Integrated Weed Management techniques which use the most effective, tailored combination of herbicides, insects, pathogens, and managed grazing with sheep, goats and cattle.
2. Utilize the commercial news media for project promotion and public awareness.
3. Provide weed identification, control suggestions and current information about weed technology through the Stillwater Extension Office newsletters and other venues.
4. Provide tools for educational purposes to train staff and concerned landowners.
5. Promote projects that result in (a) awareness and then (b) in useful action-oriented results (such as sheep and goat grazing on environmentally fragile areas in cooperation with the Montana Department of Fish, Wildlife and Parks and others.)
6. Support community action programs such as the Stillwater Valley Watershed Council and the Aerial spray project and use them as educational models for similar localized problems.
7. Encourage a "WE DO OUR OWN" signing project for those who do not wish herbicide spraying on or near their property

D. Specific Noxious weed priorities for Stillwater County

1. Each situation is studied according to the intensity of the infestation, with the participation of the landowner sought. Primary consideration is for a long-range IWM control program developed that meets the preferences and pocketbook of the landowner. Bio-control methods are being introduced and applied on all susceptible species. Various areas of Stillwater County require special approaches relevant to older, well established noxious weed infestations (low-level management to prevent the spread of plants or seeds) or environmentally fragile areas.
2. The Nye Knapweed area: eradication is still a goal (by pulling noxious weeds and the use of herbicides).
3. In the Fishtail Leafy Spurge area, containment and control are the goals (using managed grazing, spraying, mowing and insects to reduce the impact to the area and adjoining lands).

4. In the Yellowstone River islands and floodways, containment is the goal, encouraging managed grazing by sheep and goats as well as the use of insects to develop an environmentally safe and acceptable means of control.
5. On the interstate highway and railroad lands, the main effort is a prevention program to avoid infestations of Dalmatian toadflax and other new invader species.

E. SPECIAL NOXIOUS WEED SPECIES ALSO REQUIRE SPECIALIZED ATTENTION

1. Leafy spurge infestations are addressed by an IWM plan utilizing managed sheep grazing and bio-control on major infestations and the use of herbicide on all new infestations. Alternative herbicides are used for short term control, or where it is not practical to use long-term residual chemicals.
2. The County's Spotted Knapweed program calls for eradication wherever possible, with herbicides being the main control method. Due to the spread of spotted knapweed, however, insects are being introduced as a bio-control measure to supplement spraying.
3. Canada thistle is widespread and primarily a cropland problem with specialized methods of controlling including integrated mechanical and herbicide efforts.
4. Field bindweed is wide spread in cropland and roadways.
5. White top in rangeland is being treated with herbicides to promote the grass growth.
6. Dalmatian Toadflax is still an eradication priority due to sparse infestations.
7. Hounds tongue is a growing problem and responds to herbicide treatment during the first year's growth. Fall spraying is particularly effective. Biological control with insects is still being pursued as approved insects become available.
8. Burdock is a problem to livestock producers and recreational users, but is easily controlled by herbicides.

IV IMPLEMENTATION OF PROGRAMS AND PROJECTS IN STILLWATER COUNTY

A. PUBLIC EDUCATION

- Cooperate with the various agencies, agribusinesses and other groups locally and in other counties to appear on their programs promoting the weed management program in Stillwater County and exchanging information about weed issues.
- Utilize as appropriate the news media, newsletters and County Noxious Weed Control Board members as tools for education the public about identification and control of noxious weeds.

- Use IWM projects in tours and grant efforts to promote awareness, acceptance and on- the -ground cooperation.
- Provided and prepare tools for staff training and use as information for public meetings.

B. OPERATIONS/PROJECTS

Several programs have been in operation for several years and will continue.

1. The Weed District has provided and will continue to loan equipment for landowner use at no charge to those desiring to apply herbicides.
2. The right-of-way maintenance program will be continued by licensed commercial applicators at the appropriate season. (See Cooperative Agreements below).
3. The Weed District will provide special community projects with assistance and support (including equipment and possibly some herbicide.) The District may also assist with the arrangements for commercial helicopters and commercial applicators and explore sources of grant monies to help with costs.
4. The Supervisor will continue long-range noxious weed management planning for (a) this County's technical staff, and (b) subdivision landowners associations.
5. The Weed District will pursue training and research programs for (a) this County's technical staff and (b) for its Noxious Weed Management Board members so that Board members will be more qualified to assist the Weed Supervisor.
6. The supervisor will continue biological (insect) control programs: The County's Weed District has four insect species will established on leafy spurge across the county and has introduced several other experimental insects that look promising. Insect populations from many earlier released are now adequate for collection and redistribution around the County. This program is now very well accepted and showing good results. Besides spurge, we have several releases of insects on spotted knapweed and expect good results since knapweed has not yet become well established in Stillwater County at this time. Insects and pathogens for other species are expected soon.
7. The Weed District will enforce re-vegetation of disturbed sites, including gravel pits: Disturbed sites are those areas where vegetation has been destroyed by construction of pipelines, utility lines, public right-of-way, stream access or other activity on public or private land. Each such site is reviewed to determine who has responsibility for the re-establishment of vegetation and the type of plants to be used, and the company or individual creating the disturbed site must file an approved Noxious Weed Management Plan with the Weed Supervisor. The weed staff cooperates with the Conservation Service, the County Roads and Bridges Department, private contractors and other involved agencies, plus relevant private landowners.
8. The supervisor will continue to promote cooperative agreements: Help provide with cost share payment for the costs of treating noxious weeds Spraying contracts are carried out by licensed commercial applicators under the close supervision of the Weed Supervisor. Work agreements also exist with the Department of State Lands,

Bureau of Land Management, Forest Service, Stillwater Mining Company, Department of Fish Wildlife and Parks, and private land owners. When several land owners have a common problem, the Weed Supervisor makes a concerted effort to coordinate the program as a group effort.

V. NON COMPLIANCE

Section 7-22-2123 of Montana Weed Management Act will be implemented as a last resort. Cooperative agreements are relied upon for noncompliance problems.

VI. EVALUATION

1. Use both ground truth and mapping to monitor infestations of noxious weeds.
2. Initiate and utilize the information from low level helicopter flights with GPS and GIS mapping.
3. Evaluate programs in an organized way in cooperation with the County Noxious Weed Management Board and private landowners involved.
4. Assess the level of accomplishment by evaluating the complaints, commissioner contacts and public opinion.

VII. Equipment & Personal

1. The equipment used by the weed District, itself, is a one ton truck with mapping and flow rate capacities, a 4- wheeler equipped with a 24 gal sprayer, these are used on county owned property and special projects, All other weed district work is now done through licensed commercial applicators under the oversight of the weed supervisor.
2. Loan equipment is available for community projects and private land control, but must be maintained and replaced: (a) Back pack sprayers for small jobs and rough country and electric ATV unites; (b) 100 – gallon slip –in sprayers for larger jobs on more accessible land, including motor, pump and necessary spraying accessories. The equipment is in good condition as there is an excellent maintenance program and conscientious interest on the part of the users.

3. With the present active program and increasing work load the county needs a full-time Weed Supervisor as well as an assistant Supervisor to help administer programs and build the program to its potential.

VIII. ADMINISTRATION: THE BUDGET

Funding sources: The ____3.491____ mill County fund for weed management provides approximately \$_116.157_____ from local tax revenues. There is not an additional special levy for weed programs at the present time. The Montana

Other funds come from grants (such as state's Noxious Weed Trust Fund), cost sharing arrangements from chemical companies for tours or other special efforts, special research projects in the County, herbicide sales and other sources. These are accounted for in the revolving fund or by other established budget provisions. The total budget authorization for actual expenditures is based on actual income received. The Weed District budget is therefore, enhanced far beyond the County tax revenue.

Accounting system: The budget is on the BARS system of accounting with line items set up for personnel services, capital outlays and replacement, supplies, and other categories. The budget is based on the previous year's program and adjusted up or down according to need. Consideration is given to new projects, needs and innovative ideas.

